

Occasional Papers  
OF THE  
Boston Society of Natural History.

---

A NEW SUBSPECIES OF THE RED SALAMANDER  
FROM LOUISIANA.

BY SHERMAN C. BISHOP.

---

MR. PERCY VIOSCA, JR., of New Orleans, has collected a number of Red Salamanders which are sufficiently distinct from the described forms to deserve subspecific recognition. The specimens were all taken in the vicinity of Bogalusa, La., an area from which *Pseudotriton ruber* has not been recorded. *Pseudotriton montanus flavissimus*, the dwarfed, Coastal Plain derivative of *P. montanus*, has been recorded by Dunn<sup>1</sup> from near Bogalusa, but unlike this subspecies, the salamander here described attains a size scarcely less than that of the typical form. This subspecies is named in honor of the collector:

*Pseudotriton ruber vioscai*, subsp. nov.

*Type*.—No. 75057, U. S. National Museum; adult female; collected April 10, 1926. (Pl. 15, fig. 3.)

*Type locality*.—A spring run 10 miles west of Bogalusa, La.

*Description*.—The body is stout; the tail comparatively short, comprising only 35 per cent of the total length. There are fifteen costal grooves, excluding an imperfectly developed axial. The ground color of the dorsal surface in the preserved specimen is dull yellowish brown; the lower sides and venter dull yellow, lighter. The entire dorsal surface of the trunk and the tail is marked with large, well-separated black blotches which are irregular in shape but tend to form a fairly regular herringbone pattern in some individuals. On the venter and lower sides, the dark spots are smaller and closer together. There are six and one-half intercostal spaces between the appressed toes in the type. The teeth do not differ materially from those of typical *ruber*.

Measurements of four adult specimens are as follows:

<i>Total length</i>	<i>Head</i>	<i>Tail</i>	<i>Ratio of tail to total length</i>
148 mm. (type)	23 mm.	53 mm.	35
132 mm.	20 mm.	50 mm.	37.8
132 mm.	20 mm.	48 mm.	Tip regenerated
118 mm.	18 mm.	40 mm.	33.9

<sup>1</sup> The salamanders of the family Plethodontidae, p. 293, 1926.

In living specimens the ground color approaches brownish red above, fading on the lower sides and venter to salmon pink. The large dark blotches are very dark brown or black. The head between the eyes, the snout, the throat, the legs, and the sides of head and trunk are flecked with many small whitish spots, which are soon lost in preservatives.

*Remarks.*—This race is obviously more closely related to typical *ruber* than to the other described subspecies, *nitidus* and *schlenkeri*, the chief distinguishing characteristics being found in color and pattern. In old adults of *P. ruber ruber* the dark pigmented spots are considerably enlarged but tend to fuse, often, in fact, to such an extent that a mottled or marbled pattern is developed (fig. 6). In *P. ruber vioscai* the adults of all sizes are marked above with large dark spots well separated. There is no tendency toward fusion of the spots, and the ground color is sufficiently light to set them off in strong contrast (figs. 1, 3). A single living larva (fig. 2) exhibits the same pattern, which is strikingly different from that found in the larvae of *P. ruber ruber*. Typical *ruber* larvae are marked above with very small black spots closely set on a dull brown ground color (fig. 5). Whether or not the large spots are always present in the larvae of *vioscai* can only be determined by the collection of additional specimens. A single preserved larva in the collection, taken with some adult specimens, is sparsely spotted with small flecks, but may belong to *P. montanus flavissimus*.

This new subspecies differs from the mountain races, *nitidus* and *schlenkeri*, in being considerably larger and in having much larger black spots which extend to the tip of the tail. The ground color also is darker and duller, and white flecks are present on the head, trunk, and legs, as noted above.

A few specimens which may properly be regarded as intergrades between *ruber* and *vioscai* have been noticed. Thus No. 57391, U. S. National Museum, from Mobile County, Ala., is a large spotted individual which seems to be of intermediate character. In fact, in individuals from the Coastal Plain region of both the Gulf and the South Atlantic States, there is a tendency to retain the large pigment spots separately, but never to the extent found in the specimens from Louisiana.

Mr. Viosca has furnished the following field notes.

This Red Salamander has been found only in the longleaf pine region between Bogalusa and Franklinton. It occurs in or adjacent to the val-

leys of small spring-fed streams which dissect this country. The few adults known were taken either by springs under logs or on near-by hillsides. The larvae can be found in spring pools throughout this region and are more noticeable during the late afternoon or during the night when the flashlight is used. During dry weather the adults are difficult to find, but in rainy weather they come to the surface of the ground where they can be found under logs along with such species as *Eurycea gutto-lineata* (Holbrook) and *Plethodon glutinosus* (Green).

Specimens have been taken at the type locality (10 miles west of Bogalusa) as follows: April 10, 1926, 4 adults, 1 larva; February 13, 1928, 2 adults, 1 larva.

*New York State Museum,*  
*Albany, N. Y.*